

# WATERBODY DATA FORM

ENSR | AECOM

☒ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Other:

Feature ID #: S6AME001

Stream/Waterbody Name (if known): WEST BRANCH PINE CREEK

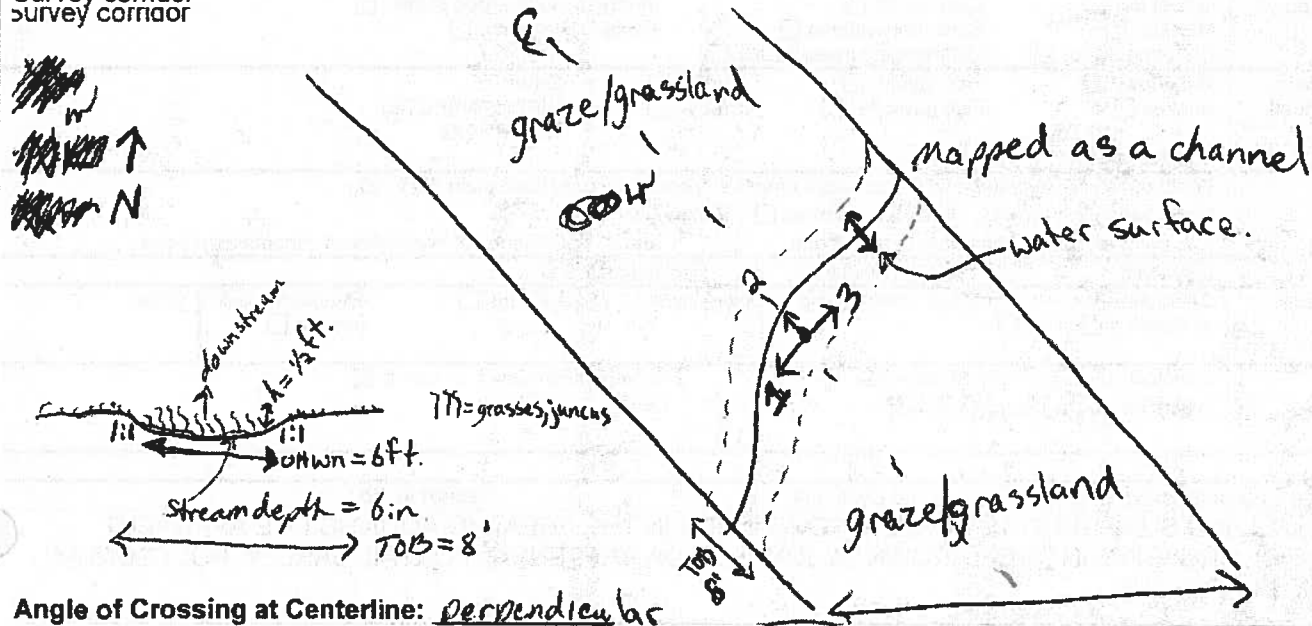
Associated Wetland ID #:

Date: 6/25/08	Project Name & No.: Keystone XL-10623-007-803A	Milepost: 378.7
Investigators: 6A	State/County: SD/ MEADE	Quad Name: SQUAW BUTTES
Logbook No.: 2	Logbook Page No.: 10,11	Tract No.: ML-SD-ME-00150.000
		Picture No.: S6AME001_NE,S,SE

## PHYSICAL ATTRIBUTES

### Waterbody Sketch Plan

Please include: Directional & North Arrow, Centerline, Length of feature, Distances from Centerline, Photo Locations, and Survey corridor



Waterbody Type	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> Borrow Pit <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ag. Ditch <input type="checkbox"/> Other:						
Stream Flow	<input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow <input checked="" type="checkbox"/> Very Slow <input type="checkbox"/> None		Flow type	<input type="checkbox"/> Perennial (Flows year round) <input type="checkbox"/> Seasonal (Continuous flow $\geq$ 3 months) <input checked="" type="checkbox"/> Intermittent (Flows < 3 months) <input type="checkbox"/> Ephemeral (Flows only in response to rainfall)			Direction of Flow where it crosses CL: N (N, NE, E, SE, S, SW, W, NW)
Subsurface Flow?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown						
OHWM Width (ft.):	6'		Sinuosity	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering			
Stream Width (ft.)	Top of Bank (at crossing location): 8'		Water Surface (at crossing location): 5'				
Stream Depth (in.)	<input type="checkbox"/> 0-3 <input checked="" type="checkbox"/> 3-6 <input type="checkbox"/> 6-12 <input type="checkbox"/> 12-18 <input type="checkbox"/> 18-24 <input type="checkbox"/> 24-36 <input type="checkbox"/> 36-48 <input type="checkbox"/> 48-60 <input type="checkbox"/> 60+						
OHWM Indicator	<input type="checkbox"/> Clear natural line on bank <input type="checkbox"/> Wrack line <input type="checkbox"/> Shelving <input type="checkbox"/> Scour <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Bent, matted or missing vegetation <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Water staining <input type="checkbox"/> Soil character changes <input type="checkbox"/> Sediment deposition <input type="checkbox"/> Sediment sorting <input type="checkbox"/> Litter and debris <input type="checkbox"/> Leaf litter disturbed <input type="checkbox"/> Other:						
Bank Height (ft.) (looking downstream)	Left: <input checked="" type="checkbox"/> 0-2 <input type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+ Right: <input checked="" type="checkbox"/> 0-2 <input type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+						
Bank Slope (looking downstream)	Left: <input type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input checked="" type="checkbox"/> 1:1 <input type="checkbox"/> Vertical Right: <input type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input checked="" type="checkbox"/> 1:1 <input type="checkbox"/> Vertical						

Date: 6/25/08		Project Name & No.: Keystone XL-10623-007-803A		Milepost: 378.7	
<b>QUALITATIVE ATTRIBUTES</b>					
<b>Water Appearance</b> (check all that apply)	Clear <input type="checkbox"/>	Turbid <input type="checkbox"/>	Sheen on surface <input type="checkbox"/>	Floating algal mats <input type="checkbox"/>	Water Color: CLEAR/ BROWN
	Slightly Turbid <input type="checkbox"/>	Very Turbid <input type="checkbox"/>	Greenish color <input type="checkbox"/>	Obvious surface scum <input type="checkbox"/>	
Other: VERY LITTLE WATER					
<b>Stream Substrate %</b>	Silts 20%	Cobbles	Bedrock	Sands	Gravel
	Concrete	Muck	Vegetation:		
Other: CLAY Explain: 80%					
<b>Aquatic Habitats</b> (check all that apply)	Sand Bar <input type="checkbox"/>	Gravel Riffles <input type="checkbox"/>	In-stream emergent plants: <input type="checkbox"/>		
	Gravel Bar <input type="checkbox"/>	Deep Pools <input type="checkbox"/>	In-stream submerged plants: <input type="checkbox"/>		
<b>Aquatic Organisms</b> Observed (check all that apply)	Mud Bar <input type="checkbox"/>	Bank root systems <input type="checkbox"/>	Fringing Wetlands: <input type="checkbox"/>		
	Undercut Banks <input type="checkbox"/>	Overhanging trees/shrubs <input type="checkbox"/>			
<b>Riparian Zone</b>	Waterfowl <input type="checkbox"/>	Fish (adult) <input type="checkbox"/>	Turtles <input type="checkbox"/>	Other:	
	Snakes <input type="checkbox"/>	Fish (juvenile) <input type="checkbox"/>	Frogs <input type="checkbox"/>	BIRDS, INSECTS CHIRPPING	
Invertebrates:					
<b>Tributary Is</b>	Width of natural vegetation zone from edge of active channel out onto flood plain (FT): 20				
	Circle vegetative layers: trees <input type="checkbox"/> shrubs <input type="checkbox"/> herbs <input checked="" type="checkbox"/>				
<input type="checkbox"/> Significant bare areas within riparian zone <input type="checkbox"/> Evidence of non-buffered concentrated flows					
<b>Channel Condition:</b>	Channelization or Braiding <input type="checkbox"/>	Unnatural straightening <input type="checkbox"/>	Downcutting <input type="checkbox"/>	Dikes/Berms <input type="checkbox"/>	Excessive bank erosion <input type="checkbox"/>
<b>Disturbances</b>	Livestock access to riparian zone <input checked="" type="checkbox"/>		Manure in stream or on banks <input checked="" type="checkbox"/>		
		Waste discharge pipes present <input type="checkbox"/>		Other:	

Describe Habitat Characteristics, Aquatic & Terrestrial Diversity:	Habitat ID No.:
-GRASS/ GRAZELAND SURROUND THE CREEK. SONG BIRDS IN THE AREA. NO AQUATIC LIFE APPARENT - CHANNEL @ CL CROSSING IS OVER GROWN W/ JUNCUS POA PRETENSIS, FOXTAIL BARLEY, POLYGONUM SPRINKLED THROUGHOUT.	

Comments (e.g. pipeline crossing angle, construction constraints, erosion potential, existing disturbances, and meanders)
-DECHANNELIZED @ CL CROSSING, FAIRLY DRY. MAPPED AS A CHANNEL. -CATTLE HAVE WATER ACCESS
<b>STREAM QUALITY</b> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low <input type="checkbox"/>